I Claim:

1. A method comprising the steps of:

(A) forming a capstock melt layer by a process comprising the steps of:

(a) forming a capstock composition;

(b) feeding said capstock composition into a first extruder comprising a feed section and a metering section;

(c) metering and melting said capstock composition to form a capstock melt;

(d) forming said capstock melt into a capstock melt layer; and

(e) extruding said capstock melt layer;

wherein said capstock composition comprises a comb copolymer comprising a backbone and at least one graft segment; and

wherein:

(i) said graft segment and said backbone are in a weight ratio from 30:70 to 60:40;

(ii) said backbone is immiscible with said graft segment at room temperature;

(iii) said backbone has a glass transition temperature of -65°C to 10°C; and

(iv) said graft segment has a glass transition temperature of 70°C to 180°C.

2. The method of claim 1, further comprising the following step:

(f) cooling said capstock melt layer to form a solid capstock layer.

3. The method of claim 1, further comprising the following steps:

(B) forming a substrate melt layer by a process comprising the steps of:

(a) forming a substrate composition;

(b) feeding said substrate composition into a second extruder comprising a feed section and a metering section;

(c) metering and melting said substrate composition to form a substrate melt;

(d) forming said substrate melt into a substrate melt layer;

(e) extruding said substrate melt layer; and

wherein said substrate composition comprises a thermoplastic polymer;

(C) causing said capstock melt layer to contact said substrate melt layer to form a multi-layered melt composite; and

(D) cooling said multi-layered melt composite to form a multi-layered polymeric composite, comprising a solid capstock layer disposed upon a solid substrate layer.

4. The method of any of claims 1, 2, and 3, wherein said step of forming said capstock composition further comprises the steps of:

(A) forming a macromonomer aqueous emulsion comprising a plurality of water-insoluble particles of macromonomer, wherein:

(i) said macromonomer comprises polymerized units of at least one first ethylenically unsaturated monomer; and

(ii) said macromonomer further has:

(a) a degree of polymerization of from 10 to 1000; and

(b) at least one terminal ethylenically unsaturated group;

(B) forming a monomer composition comprising at least one second ethylenically unsaturated monomer;

(C) combining at least a portion of said macromonomer aqueous emulsion and at least a portion of said monomer composition to form a polymerization reaction mixture;

(D) polymerizing said macromonomer with said second ethylenically unsaturated monomer in the presence of an initiator to produce said plurality of comb copolymer particles; and

(E) isolating said comb copolymer particles to form a solid comb copolymer.

5. The method of Claim 4 wherein said macromonomer is a macromonomer produced by aqueous emulsion polymerization.

6. The method Claim 1, wherein said comb copolymer has a weight average molecular weight of 80,000 to 2,000,000.

7. The method of claim 2 or 3:

wherein said solid capstock layer is an impact resistant capstock layer having a composition which is the same as the composition of Dropping Dart Impact specimens prepared and tested according to ASTM method D-446 with impact head configuration H.25; and

wherein said Dropping Dart Impact specimens have a dart impact energy of at least 2.0 joules.

8. The method of claim 3, wherein said thermoplastic polymer is a polymer selected from the group consisting of poly(vinyl halide), chlorinated poly(vinyl chloride), ABS terpolymer, polyaromatics, polyamides, polyesters, polyolefins, and combinations thereof.

9. The method of claim 8, wherein said thermoplastic polymer is a polymer selected from the group consisting of poly(vinyl chloride), ABS terpolymer, and combinations thereof.

10. A multi-layered polymeric composite produced by the method of claim 3.

11. A multi-layered polymeric composite comprising:

(a) at least one solid substrate layer comprising a thermoplastic resin; and

(b) at least one solid capstock layer disposed thereon, wherein said solid capstock layer comprises a comb copolymer:

wherein said comb copolymer comprises a backbone and at least one graft segment; and

wherein:

(i) said graft segment and said backbone are in a weight ratio from 30:70 to 60:40;

(ii) said backbone is immiscible with said graft segment at room temperature;

(iii) said backbone has a glass transition temperature of -65°C to 10°C; and

(iv) said graft segment has a glass transition temperature of 70°C to 180°C.

12. The multi-layered polymeric composite of Claim 11, wherein said comb copolymer has a weight average molecular weight of 80,000 to 2,000,000.

13. The multi-layered polymeric composite of claim 11, wherein said thermoplastic polymer is a polymer selected from the group consisting of poly(vinyl halide), chlorinated poly(vinyl chloride), ABS terpolymer, polyaromatics, polyamides, polyesters, polyolefins, and combinations thereof.

14. The multi-layered polymeric composite of claim 11, wherein said thermoplastic polymer is a polymer selected from the group consisting of poly(vinyl chloride) and ABS terpolymer.

15. The composite of claim 11:

wherein said solid capstock layer is an impact resistant capstock layer having a composition which is the same as the composition of Dropping Dart Impact specimens prepared and tested according to ASTM method D-446 with impact head configuration H.25; and

wherein said Dropping Dart Impact specimens have a dart impact energy of at least 2.0 joules.